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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,507	09/23/2003	Paul J. Cecil	05165.1220	2578

7590 09/09/2005

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EXAMINER
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ELEY, TIMOTHY V

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/667,507

Applicant(s)

CECIL ET AL.

Examiner

Timothy V. Eley

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 27 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 25-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3724

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Group II, claims 1-24 in the reply filed on July 27, 2005 is acknowledged. The traversal is on the ground(s) that the independent claims of Group I includes "means" for performing the steps recited in the independent claim of Group II, using the same language; and that (i)f the apparatus claims include a claim to "means" for practicing the process, the claim is a linking claim and must be examined with the elected invention. This is not found persuasive because the independent claims of Group I does not include "means for", however, independent claim 13 of Group II does include "means for", and is being examined with the Group II, claims 1-24.

The requirement is still deemed proper and is therefore made FINAL.

***Specification***

2. The disclosure is objected to because numeral "42"(paragraph 23, lines 3 and 4) denotes 2 separate elements.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and

Art Unit: 3724

use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 17-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- Applicant recites in claims 17-20, means for performing various tasks. However, these means are not specifically explained in the specification. For example, in claim 17, applicant recites a "means for modifying the surfacing device for a surfacing task". The means are not clearly defined in the specification. Is the means a separate tool, bolts for holding the surfacing device, or the actual surfacing device itself?

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2-4, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- In claim 2, line 4, "the controlled amount of force" lacks proper antecedent basis since it was not properly earlier referred to.

Art Unit: 3724

- In claim 14, lines 2 and 3, is this "means for actively following the contour" the same as the "means for following a contour" recited in claim 13, line 5?

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1,2,5-8,13,16-20 and 23 are rejected under 35

U.S.C. 102(b) as being anticipated by Whitsett.

- Whitsett discloses an apparatus for preparing a surface with a surface preparation device(16), the apparatus comprising; a mount (including elements 132,162, etc., see figure 3) that supports the surface preparation device; a platform(93); and a suspension system(including element 14) that applies a force pressing the mount towards the surface, the suspension system being disposed between the mount and the platform, the suspension system being operable to position the surface preparation device in contact with the surface. See figure 1.
- Regarding claim 2, applicant's broad recitation of "armature" is met by element 91. Also, winch 100 functions as an actuator for

Art Unit: 3724

providing a controlled amount of force. See column 4, lines 9-13 and column 7, lines 30 and 31.

- Regarding claims 5 and 6, the mount is "gimbaled"(see column 4, lines 61-end to column 5, lines 1-4) and allows the device to follow a contour of the surface.
- Regarding claims 7 and 8, a plurality of wheels(78,80,82,84) is attached to the platform facilitating mobility thereof.
- Regarding claims 13 and 16, means 184 modulate a height of the surfacing device in response to a change in a height of the surface relative to the floor; means 14 follow a contour of the surface with the surfacing device; and means 90 controls an amount of force exerted by the surface device upon the surface.
- Regarding claims 17-20, to the extent that they are understood, the means 40 is capable of performing the recited limitations in claims 17-20, since the means 40 may be removed to allow replacement of the surfacing device.
- Regarding claim 23, means 14 allow for moving of the surfacing device relative to the surface.

9. Claims 1-10,13,14,16-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Appel et al.

- Appel et al discloses an apparatus for preparing a surface with a surface preparation device(32), the apparatus comprising; a mount (30) that supports the surface preparation device; a platform(20); and a suspension system(102) that applies a force

Art Unit: 3724

pressing the mount towards the surface, the suspension system being disposed between the mount and the platform, the suspension system being operable to position the surface preparation device in contact with the surface. See figures 5 and 6, column 9, lines 48-end to column 10, lines 1-12.

- Regarding claims 2 and 3, element 104 and 106 meet applicant's broad recitation of "armature". Also, springs 108a and 108b function as an actuator for providing a controlled amount of force and can be replaced by a pneumatic device. See column 9, lines 65-67 to column 10, lines 1-12.
- Regarding claim 4, the apparatus further comprises a regulator for controlling the amount of force provided by the pneumatic cylinder. See column 5, lines 30-44.
- Regarding claims 5 and 6, the mount is "gimbaled" (see column 8, line 28) and allows the device to follow a contour of the surface.
- Regarding claims 7-10, a plurality of wheels is attached to the platform facilitating mobility thereof, and a pneumatically powered motor is inherently attached to at least one of the plurality of wheels and configured to propel the platform by rotating the at least one wheel. See column 7, lines 12-20.
- Regarding claims 13, 14 and 16, means 104, 106 modulate a height of the surfacing device in response to a change in a height of the surface relative to the floor; means 32 follow a contour of the

Art Unit: 3724

surface with the surfacing device; and means 108a,108b control an amount of force exerted by the surface device upon the surface in response to a computer readable inherently representation of the contour of the surface(see column 7, lines 18-20.

- Regarding claims 17-20, to the extent that they are understood, the means 32 is capable of performing the recited limitations in claims 17-20, since it contains suitable means that may be removed to allow replacement of the surfacing device. See column 7, lines 65-67 to column 8, lines 1-10.
- Regarding claims 21-43, pneumatic means allow for moving of the surfacing device relative to the surface. See column 10, lines 8-12.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 11 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Appel et al(6,189,473).

- Appel et al is explained above.
- Appel et al does not specifically a steering linkage which is modulated pneumatically and configured to control the rotational plane of at least one of the plurality of wheels.



Art Unit: 3724

- However, since clearly the apparatus is completely mobile without any direct assistance from humans, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a steering linkage which would allow at least one of the wheels to turn whereby the apparatus may also be turned. See column 10, lines 22-25.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Appel et al (6,189,473) in view of Beckett et al (5,643,047).

- Appel et al is explained above.
- Appel et al does not disclose means for sensing the contour of a surface and actively following the contour of the surface in response to the sensed contour of the surface.
- Beckett et al discloses that it is well known in the art to prepare a surface by using an apparatus which senses the contour of a surface and actively follows the contour of the surface in response to the sensed contour of the surface. See abstract.
- Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Appel et al apparatus by providing means for sensing the contour of the surface and actively following the contour of the surface with the means (32) for actively following the contour of the surface in response to the sensed contour of the surface.

**Conclusion**

Art Unit: 3724

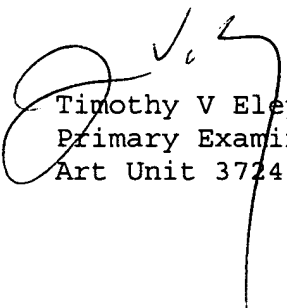
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- The cited references disclose apparatuses for processing surfaces located above a floor.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy V. Eley whose telephone number is 571-272-4506. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Timothy V Eley  
Primary Examiner  
Art Unit 3724

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